

**COMBINED TRANSMITTAL OF APPEAL BRIEF TO THE BOARD OF PATENT  
APPEALS AND INTERFERENCES & PETITION FOR EXTENSION OF TIME  
UNDER 37 C.F.R. 1.136(a) (Small Entity)**

Docket No.  
**T2317-907720**

In Re Application Of:

Larry E. Mashburn et al.

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/059,278	January 31, 2002	Cheryl Ann Juska	000181	1771	5374



## Carpet Backing Prepared from Vegetable Oil-Based Polyurethane

**COMMISSIONER FOR PATENTS:**

This is a combined Transmittal of Appeal Brief to the Board of Patent Appeals and Interferences and petition under the provisions of 37 CFR 1.136(a) to extend the period for filing an Appeal Brief.

Applicant(s) hereby request(s) an extension of time of (check desired time period):

One month       Two months       Three months       Four months       Five months

from: April 16, 2005  
Date until: May 16, 2005  
Date

**The fee for the Appeal Brief and Extension of Time has been calculated as shown below:**

04/23/2005 SZEWDIE1 00000087 10059278 Fee for Appeal Brief: \$250.00

01 Feb 2025 60.00 OP Fee for Extension of Time: \$60.00

**TOTAL FEE FOR APPEAL BRIEF AND EXTENSION OF TIME:** \$310.00

The fee for the Appeal Brief and extension of time is to be paid as follows:

A check in the amount of \$310.00 for the Appeal Brief and extension of time is enclosed.

Please charge Deposit Account No. in the amount of

The Director is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-1165

Any additional filing fees required under 37 C.F.R. 1.16.

Any patent application processing fees under 37 CFR 1.17.

If an additional extension of time is required, please consider this a petition therefor and charge any additional fees which may be required to Deposit Account No. .

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**COMBINED TRANSMITTAL OF APPEAL BRIEF TO THE BOARD OF PATENT  
APPEALS AND INTERFERENCES & PETITION FOR EXTENSION OF TIME  
UNDER 37 C.F.R. 1.136(a) (Small Entity)**

Docket No.  
**T2317-907720**

In Re Application Of:

**Larry E. Mashburn et al.**

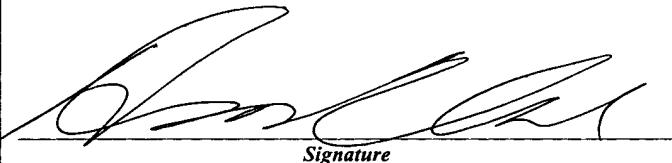
Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
<b>10/059,278</b>	<b>January 31, 2002</b>	<b>Cheryl Ann Juska</b>	<b>000181</b>	<b>1771</b>	<b>5374</b>

Invention:

**Carpet Backing Prepared from Vegetable Oil-Based Polyurethane**

**TO THE COMMISSIONER FOR PATENTS:**

This combined Transmittal of Appeal Brief to the Board of Patent Appeals and Interferences and petition for extension of time under 37 CFR 1.136(a) is respectfully submitted by the undersigned:



*Signature*

Dated: April 22, 2005

**Dennis P. Clarke, Reg. No. 22,549**

**Miles & Stockbridge P.C.  
1751 Pinnacle Drive, Suite 500  
McLean, VA 22102-3833  
Tel: (703) 903-9000  
Fax: (703) 610-8686**

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Docket No. T2317-908077

IN THE UNITED STATES PATENT & TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS & INTERFERENCES

Appellant: Larry E. Mashburn et al. : Confirmation No. 5374  
Serial No.: 10/059,278 : Art Unit: 1771  
Filed: January 31, 2002 : Examiner: Cheryl Ann Juska  
For: Carpet Backing Prepared from Vegetable Oil Based Polyurethane : Customer No. 000181

**BRIEF ON APPEAL**

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The following Brief on Appeal is submitted in support of the appeal of the Office Action mailed September 8, 2004, wherein the Examiner finally rejected claims 1-35.

The appeal fee of \$250.00 is submitted herewith.

To the extent necessary, appellant petitions for an extension of time under 37 CFR §1.136. Please charge any additional fees due (or credit any overpayment thereof) to Deposit Account No. 50-1165 (Docket No. T2317-907720).

Respectfully submitted,

MILES & STOCKBRIDGE P.C.

Dennis P. Clarke  
Registration No. 22,549

04/25/2005 SZEWDIE1 00000087 10059278  
02 FC:2402 250.00 0P

Date: April 25, 2005

1751 Pinnacle Drive  
Suite 500  
McLean, VA 22102  
Tel: (703) 610-8672  
Fax: (703) 610-8686  
[dclarke@milesstockbridge.com](mailto:dclarke@milesstockbridge.com)

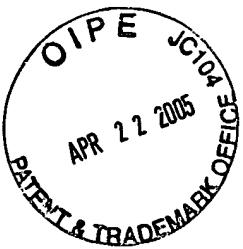


## TABLE OF CONTENTS

	<u>Page(s)</u>
TABLE OF AUTHORITIES .....	ii
REAL PARTY IN INTEREST .....	1
RELATED APPEALS AND INTERFERENCES .....	1
STATUS OF CLAIMS .....	1
STATUS OF AMENDMENTS .....	1
SUMMARY OF THE INVENTION .....	1
ISSUES ON APPEAL .....	5
GROUPING OF CLAIMS .....	6
ARGUMENTS .....	6
CONCLUSION .....	19
APPENDIX .....	A-i
Claims on Appeal .....	A-i

## **TABLE OF AUTHORITIES**

	<u>Page(s)</u>
<i>In re Blaser</i> , 194 USPQ 122 .....	13
<i>In re Lukach</i> , 169 USPQ 795 .....	13
<i>In re Wertheim</i> , 191 USPQ 90 .....	16
<i>In re Smythe</i> , 480 F.2d 1376, 1384 (C.C.P.A. 1973) .....	17
<i>In re Wertheim</i> , 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976) .....	18
<i>Ex parte Sorenson</i> , 3 USPQ2d 1462, 1463 (Bd. Pat. App. & Inter. 1987) .....	18



### **REAL PARTY IN INTEREST**

The real party in interest herein is the Universal Textile Technologies, to which the above-captioned application is assigned by virtue of an Assignment from the inventors executed May 14, 2002, which was recorded August 7, 2002, on Reel 012948 at Frame 0911.

### **RELATED APPEALS AND INTERFERENCES**

There are no Appeals or Interferences related to the Appeal of the claims of the present application.

### **STATUS OF CLAIMS**

The above-captioned application was filed with original claims 1-35. This is an appeal from the final rejection of claims 1-35, all of the claims remaining in the application.

### **STATUS OF AMENDMENTS**

A Response to the final Office Action was filed on February 16, 2005. An Advisory Action was issued March 4, 2005 stating that the Response did not place the application in condition for allowance.

### **SUMMARY OF THE INVENTION**

The present invention relates to flexible urethane foams and elastomers, useful as environmentally friendly carpet backings, prepared by the reaction between isocyanates, cross-linking agents, and vegetable oils.

Because of their widely ranging mechanical properties and their ability to be relatively easily machined and formed, plastic foams and elastomers have found wide use in a multitude of industrial and consumer applications. In particular, urethane foams and elastomers have been found to be well suited for many applications. Automobiles, for instance, contain a number of components, such as cabin interior parts, that are comprised of urethane foams and elastomers. Such urethane foams are typically categorized as flexible (or semi-rigid) or rigid foams; with flexible foams generally being softer, less dense, more pliable and more subject to structural rebound on subsequent loading than rigid foams.

Various methods for the production of polyurethane backings on textiles for floor coverings, including carpets are known and described in numerous patents and prior art references. The production of urethane foams and elastomers is well known in the art. Urethanes are formed when NCO groups react with hydroxyl groups. The most common method of urethane production is via the reaction of a polyol and an isocyanate which forms the backbone urethane group. A cross-linking agent may also be added. Depending on the desired qualities of the final urethane product, the precise formulation may be varied. Variables in the formulation include the type and amounts of each of the reactants.

In the case of a urethane foam, a blowing agent is added to cause gas or vapor to be evolved during the reaction. The blowing agent creates the void cells in the final foam, and may be a relatively low boiling solvent or water. A low boiling solvent evaporates as heat is produced during the isocyanate/polyol reaction to form vapor bubbles. If water is used as a blowing agent, a reaction occurs between the water and the isocyanate group to form an amine and CO<sub>2</sub> gas in the form of bubbles. In either case, as the reaction proceeds and the material

solidifies, the vapor or gas bubbles are locked into place to form void cells. Final urethane foam density and rigidity may be controlled by varying the amount or type of blowing agent used.

A cross-linking agent is often used to promote chemical cross-linking to result in a structured final urethane product. The particular type and amount of cross-linking agent used will determine such final urethane properties such as elongation, tensile strength, tightness of cell structure, tear resistance and hardness. Generally, the degree of cross-linking that occurs correlates to the flexibility of the final foam product. Relatively low molecular weight compounds with greater than single functionality are found to be useful as cross-linking agents.

Catalysts may also be added to control reaction times and to effect final product qualities. The effects of catalysts generally include the speed of the reaction.

Polyols typically used in the production of urethanes are petrochemicals, being generally derived from ethylene glycol with polyester polyols and polyether polyols being the most common polyols used in urethane production. For semi-rigid foams, polyester or polyether polyols with molecular weights of from 3,000 to 6,000 are generally used, while for flexible foams shorter chain polyols with molecular weight of from 600 to 4,000 are generally used. There is a very wide variety of polyester and polyether polyols available for use, with a particular polyol being used to engineer and produce a particular urethane elastomer or foam having desired particular final toughness, durability, density, flexibility, compression set ratio, and modulus and hardness quality. Generally, lower molecular weight polyols and lower functionality polyols tend to produce more flexible foams than do heavier polyols and higher functionality polyols. In order to eliminate the need to produce, store, and use different polyols, it would be advantageous to have a single versatile component that was capable of being used to create final urethane foams of widely varying qualities.

Further, use of petrochemicals such as polyester or polyether polyols is disadvantageous for a variety of reasons. As petrochemicals are ultimately derived from petroleum, they are a non-renewable resource. The production of a polyol requires a great deal of energy, as oil must be drilled, extracted from the ground, transported to refineries, refined and otherwise processed to yield the polyol. These required efforts add to the cost of polyols, and to the disadvantageous environmental effects of its production. Also, the price of polyols tends to be somewhat unpredictable as it tends to fluctuate based on the fluctuating price of petroleum.

Also, as the consuming public becomes more aware of environmental issues, there are distinct marketing disadvantages to petrochemical-based products. Consumer demand for "greener" products continues to grow.

It would therefore be most advantageous to replace polyester or polyether polyols as used in the production of urethane elastomers and foams with a more versatile, renewable, less costly, and more environmentally friendly component.

An unresolved need therefore exists in industry for a urethane elastomer and a flexible urethane foam, and a method of producing such materials, that are based on a reaction between isocyanates and a relatively inexpensive, versatile, renewable, environmentally friendly material such as vegetable oils as a replacement for polyether or polyester polyols.

More particularly, the invention relates to a textile having at least one adherent foamed polyurethane backing, the backing being prepared from a polyurethane forming composition which comprises:

- (A) a polyisocyanate and
- (B) a mixture of at least one vegetable oil, a cross-linking agent, and a blowing agent.

## **ISSUES ON APPEAL**

Claims 1-16, 18, 19, 22, 26-29 and 32 stand finally rejected under 35 USC §102(e) as anticipated by, or in the alternative under 35 USC 103(a) as unpatentable US 2002/0090488 (Kurth).

An issue presented for appeal is whether Kurth et al anticipates the claimed invention and, if not, whether the Examiner has made out a *prima facie* case of obviousness of the claims within the meaning of 35 USC §103 based on Kurth.

Claim 17 stands rejected under 35 USC 103(a) as unpatentable US 2002/0090488 (Kurth).

A second issue presented for appeal is whether the Examiner has made out a *prima facie* case of obviousness of the claim within the meaning of 35 USC §103 based on Kurth.

Claims 20, 21, 24, 25, 30, 31, 34 and 35 stand rejected under 35 USC 103(a) as unpatentable US 2002/0090488 (Kurth) in view of US 6,060,145 (Smith).

A third issue presented for appeal is whether the Examiner has made out a *prima facie* case of obviousness of the claims within the meaning of 35 USC §103 based on the combined teachings of Kurth and Smith.

Claims 23 and 33 stand rejected under 35 USC 103(a) as unpatentable US 2002/0090488 (Kurth) in view of US 2003/0114062 (Scott).

A fourth issue presented for appeal is whether the Examiner has made out a *prima facie* case of obviousness of the claims within the meaning of 35 USC §103 based on the combined teachings of Kurth and Scott.

Claims 13-25 and 30-35 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14-26 and 28-33, respectively, of copending Application No. 10/097,439.

A fifth issue presented for appeal is whether the Examiner has made out a *prima facie* case of obviousness of the claims within the meaning of 35 USC §103 based on the claims of the copending application.

Claim 12 stands “objected to” under 37 CFR 1.75 as being a substantial duplicate of claim 4.

A sixth issue presented for appeal is whether the claims are indeed duplicative of each other within the meaning of 37 CFR 1.75.

The Examiner has also taken the position that the present application is not entitled to the priority of provisional application 60/275,631 under 35 USC 119(e).

A seventh issue presented for appeal is whether the provisional application provides sufficient support for the appealed claims.

### **GROUPING OF CLAIMS**

Appellant will concede that all of the claims stand or fall together.

### **ARGUMENTS**

#### **FIRST ISSUE - Rejection of Claims 1-16, 18, 19, 22, 26-29 and 32 over US 2002/0090488 (Kurth)**

It is appellant’s position that Kurth is not available as prior art against the rejected claims because its effective date (filing date) is October 10, 2001 and the effective date of the

present application is that of Provisional Application No. 60/275,631 filed March 15, 2001, from which priority is claimed.

Although the Kurth reference claims the benefit of numerous applications, Kurth itself is a continuation-in-part application. It is not evident on its face that Kurth is entitled to the dates of any of said prior applications.

The Examiner contends that Kurth is entitled to the filing date of prior provisional Application, Serial No. 60/239,161, namely October 10, 2000 and that therefore Kurth is available prior art against the appealed claims. An examination of the provisional application in question, however, will reveal that Kurth is not entitled to the priority thereof.

Kurth, according to the Examiner in the first Official Action, discloses and claims:

*“---a bio-based carpet comprising a tufted face, a primary backing, a pre-coat, and a backing material ( abstract). The pre-coat and the backing material comprise the reaction product of (A) a isocyanate and (B) a polyol, a vegetable oil, cross-linker, and a catalyst (abstract and claim 1)---” (emphasis added).*

If Kurth is entitled to the filing date of Provisional Application 60/239,161, the latter must at least disclose and support the above quoted disclosure of Kurth. The Provisional Application, however, does not disclose the use of a vegetable oil as a component of the urethane product disclosed therein. Rather, the Provisional proposes the use of a transesterified vegetable oil. Attention is directed to the paragraph bridging pages 4 and 5 of the provisional application wherein the invention therein is described thusly:

*“---SUMMARY OF THE INVENTION*

*This invention generally relates to a new vegetable oil based polyol of increased and selectable functionality and the method of producing the new polyol by transesterification of a saccharide component typically a monosaccharide, a disaccharide, a polysaccharide, a sugar alcohol or honey with a multi-functional*

*alcohol, but preferably fructose or cane sugar, to form a first ester (precursor product) and then reacting the first ester with a vegetable oil, preferably blown soy oil, in a second trans esterification process to form the new polyol. The invention also generally relates to the use of the new transesterified polyol in all urethane products as well as its use in specific applications such as the residential and commercial carpet foam backing industry and the automobile industry---". (emphasis added)*

Thus, rather than using a vegetable oil, the Provisional Application employs a transesterified vegetable oil. As demonstrated by the Provisional Application itself, a transesterified vegetable oil is an altogether different chemical entity than vegetable oil itself. The transesterified product of the Provisional Application requires the reaction of the vegetable oil with no less than two different reactants. First, a saccharide component must be reacted with a "multifunctional alcohol" to form a "first ester" and then this "first ester" must be reacted with the vegetable oil "in a second transesterification process" to form the "new" transesterified product.

The Examiner has presented no evidence or argument to support the proposition that a transesterified vegetable oil is any way equivalent to the vegetable oil itself. Indeed, the prior art is rife with disclosures that the two materials are two distinct chemical entities possessing totally different chemical and physical properties.

Attention is directed to the disclosure in Yli-Jokipii et al, Journal of Lipid Research, Vol. 42, 1618-1625, October 2001:

*"---records revealed that the percentage of total energy from saturated fat was greater before the test with palm oil than before the test with transesterified palm oil. This result was obviously undesired---".*

Reference is also made to Foidl N, Eder P (1997), "Agro-industrial exploitation of *J. curcas*. In. Biofuels and Industrial Products from *Jatropha curcas*", Gübitz GM, Mittelbach M,

Trabi M (Eds), Dbv-Verlag, Graz, Austria, which sets forth in the following table the differences between jatropha (vegetable) oil and the transesterified product thereof:

Some important parameters of raw and transesterified jatropha oil

Parameter	Jatropha Oil Raw	Jatropha Oil Transesterified	EDIN 51606 standard
Density ( $\text{g cm}^{-3}$ at 20°C)	0,920	0,879	0.875 - 0.890
Flash Point (°C)	236	191	> 110
Cetane no. (ISO 5165)	23-41	51	> 49
Viscosity ( $\text{mm}^2/\text{s}$ at 30°C)	52	4.84	3.5 - 5 (40°C)
Neutralisation number (mg KOH/g)	0.92	0.24	< 0.50
Total glycerine (%)	-	0.088	< 0.250
Free glycerine (%)	-	0.015	< 0.02
Phosphorus (ppm)	290 (17 in degummed oil)	17.5*	<10
Sulphated ash (%)	-	0.014	< 0.03
Methanol (%)	-	0.06	< 0.3

The differences in chemical and physical properties of the distinct chemical entities are apparent.

The distinct differences between vegetable oils and their transesterified products are also pointed out by Gerhard Knothe, Presented in part at the 89th AOCS Annual Meeting & Expo, Chicago, IL, May, 1998. JAOCS, Vol. 77, No. 5 (2000):

*“---The transesterification of a vegetable oil or animal fat with a monohydric alcohol such as methanol in the presence of a catalyst (usually a base such as NaOH or KOH) affords the corresponding monoalkyl esters--The amount of contaminants (such as glycerol; mono-, di-, and triglycerides; and alcohol) present in the fuel after posttransesterification purification is a major factor in determining fuel quality. The possible contaminants are limited in biodiesel standards and the rationales for various specifications in fuel standards have been discussed ---. The analysis of contaminants in biodiesel fuel is a major issue influencing commercial success because contaminants can lead to severe operational problems such as engine deposits.---” (emphasis added)*

Indeed, some of the very Kurth applications listed in the lineage of applications from which the Kurth reference claims priority emphasize the well recognized differences between vegetable oils and their transesterified products. See US Patent Application Publication Nos. 20020017629, 20020121328, 20020119321 and 20020058774.

Particular reference is made to 20020121328, page 24 [0335] wherein it is disclosed:

*“---[0335] While vegetable oil based transesterified polyols are preferred in urethane production, an alternative embodiment of the present invention includes a cellular material that is the reaction product of an A-side and a B-side, where the A-side is comprised of a diisocyanate and the B-side comprises a vegetable oil, or a blown vegetable oil, a cross-linking agent comprised of a multi-functional alcohol, and a catalyst. This alternative further comprises a method for preparing a cellular material comprising the reactive product of an A-side comprised of a prepolymer diisocyanate and a B-side. The B-side comprises a first vegetable oil, a cross-linking agent comprised of a multifunctional alcohol, a catalyst, and a blowing agent.*

First, it is well established in the prior art that transesterified vegetable oils are completely separate and distinct chemical entities from the non-transesterified vegetable oils. Secondly, this fact is acknowledged by the very applicant himself (Kurth) in the line of prior patent applications of which the Examiner states that Kurth is entitled to the priority. It therefore flies in the face of reason to conclude that the Kurth reference is entitled to the priority of a

Provisional Application that only employs transesterified vegetable oils and discloses no process or product employing pure vegetable oil.

Accordingly, Kurth is not available as prior art against the appealed claims since it is limited to its filing date as its effective date and that date is subsequent to the effective date of the present application.<sup>1</sup>

Accordingly, a reversal of this ground of rejection is respectfully requested.

SECOND ISSUE – Obviousness of claim 17 over Kurth

Since Kurth is not available prior art against the rejected claims for the reasons set forth above, a reversal of this ground of rejection is respectfully requested.

THIRD ISSUE - obviousness of the Claims 20, 21, 24, 25, 30, 31, 34 and 35 over Kurth and Smith.

Since Kurth is not available prior art against the rejected claims for the reasons set forth above, a reversal of this ground of rejection is respectfully requested.

FOURTH ISSUE - obviousness of claims 23 and 33 over Kurth and Scott.

Since Kurth is not available prior art against the rejected claims for the reasons set forth above, a reversal of this ground of rejection is respectfully requested.

---

<sup>1</sup> The Examiner has taken the position that the present application is not entitled to the filing date of its provisional application and that, therefore, the present application is limited to its filing date which is predicated by the Kurth filing date. Since this matter comprises a separate objection by the Examiner, it will be discussed separately below (Seventh Issue).

FIFTH ISSUE - obviousness of claims 13-25 and 30-35 over the copending application.

At the time of allowance of claims in either application, either the claims will be cancelled or a Terminal Disclaimer will be filed.

SIXTH ISSUE – are claims 4 and 12 duplicative of each other within the meaning of 37 CFR 1.75

Upon allowance of the application, one of claims 4 or 12 will be cancelled.

SEVENTH ISSUE - Is appellant entitled to the benefit of the filing date of its provisional application

The Examiner is of the opinion that the present application is not entitled to the benefit of the filing date of the provisional application for the reasons stated in the final Office Action:

*“---However, the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. 112 for claims 1-35 of this application. Specifically, provisional application 60/275,631 does not provide support for the independent claim limitation that the multi-functional alcohol is "present in a ratio to said vegetable oil such that there are at least 0.7 moles of OH groups per mole of bulk vegetable oil." Additionally, there are numerous dependent claim limitations that are not supported (e. g., specific compositional components and the amounts thereof) ---” (emphasis added).*

Appellant had pointed out to the Examiner the disclosure of the examples at pages 8-10 of the specification of the provisional application wherein support for the limitations in question may be found.

Thus, in Example 1 it is disclosed that there are 30 lbs. of multifunctional alcohol and 399 lbs. of soy-based oil present in the reaction mixture. In Example 2, it is stated that there are 30.8 lbs. of multifunctional alcohol and 110 lbs. of soy-based oil present. It is respectfully

submitted that these ratios, both being above the minimum ratio required in the present claims and the lower ratio being substantially close thereto, adequately support the claim limitation. The same is true with respect to the other ratios and reactant proportions and parameters set forth in the claims.

If it is the Examiner's position that the specification of the provisional application can only "support" the claim limitations by using precisely the same language, it is respectfully submitted that the patent law with regard to support for claim limitations in the specification is otherwise. For example, see *In re Blaser*, 194 USPQ 122 wherein the federal court stated:

*"---Appellants rely on the rationale of In re Wertheim, supra, as " 'clearly applicable here.' Appellants urge that if a disclosure of 25-60% solids content taught those skilled in the art that 35-60% was part of the invention in Wertheim, although the latter range was not expressly mentioned therein, then appellants' disclosure of 60<sup>0</sup> C to 200<sup>0</sup> C in SN 159,159 would likewise teach 80<sup>0</sup> C to 200<sup>0</sup> C as part of appellants' invention. We agree with appellants that Wertheim is controlling on this point. We further note that in SN 159,159 appellants disclosed initially mixing the starting materials at a temperature up to 80<sup>0</sup> C prior to heating the reaction blend thus obtained to a maximum temperature of 200<sup>0</sup> C. We conclude that SN 159,159 adequately supports the limitation "80<sup>0</sup> C to 200<sup>0</sup> C" as recited in claims 7-12---".*

The controlling decision in this area of the law, as stated in *Blaser* is that in *In re Wertheim*, 191 USPQ 90, wherein the predecessor to the CAFC held as follows:

*"--- Fact that applicants' foreign application describe the invention as employing a colloids contents within 25-60% range along with specific embodiments of 36% and 50% warrant a conclusion, in context of process for making freeze-dried instant coffee from concentrated coffee, that persons skilled in art would consider claimed process employing 35-60% solids content range to be part of invention; Patent and Trademark Office's mere argument of lack of literal support is not enough; In re Lukach, 169 USPQ 795, statement that invention claimed does not have to be described in *ipsis verbis* in order to satisfy 35 U.S.C. 112 description requirement would be empty verbiage if lack of literal support alone were enough to support 35 U.S.C. 112 rejection; burden of showing that claimed invention is not described in specification rests on Patent and Trademark Office in first instance, and it is up to it to give reasons why description not in *ipsis verbis* is insufficient.*

Therefore, the law in this area is clear: the specification need not *ipsis verbis* recite claim language in order to provide support therefore. It is sufficient that the specification make it clear that the applicant had possession of the invention defined in the claim at the time of filing the application whose support is sought.

Thus, in the present case, since the examples set forth in the specification of the provisional application recite proportions, ratios and parameters well within the ranges set forth in the specification, the specification is adequately supportive thereof notwithstanding that the exact same language is not used therein. See *Wertheim* and *Blaser, supra*.

The Examiner replied in the Advisory action:

*The examiner is aware of Wertheim, but does not believe it is applicable to the present application. In particular, Wertheim held that disclosure of a broad range is adequate support for a narrower range within said broad range. On the other hand, applicant is arguing that the working examples of the provisional application provide support for the range "at least 0.7 moles of OH groups per mole of bulk vegetable oil." [Note the working examples of the provisional application do not actually provide molar ratios, but rather pounds of alcohol per pound of oil and applicant has not shown or calculated the correlation of the pound ratio to molar ratio.] Applicant states that since both working examples have molar ratios above the minimum ratio required by the claim and since the lower ratio is substantially close thereto, the provisional application provides adequate support for the present claims. The examiner respectfully disagrees in that the range claimed is an open-ended range wherein the examples supposedly have molar ratios within said open-ended range. This is significantly different from Wertheim's narrowing of a disclosed broad range. A few exemplary values cannot provide adequate support for an open-ended broad range ---".*

The Examiner's reasoning is fatally flawed for the following reasons.

First, it is of little consequence that the claimed range is "open-ended" (if, indeed it is truly open-ended). The key limitation in the claim is that the stated molar ratio must be above a certain value. No upper limit is imposed. Accordingly, in order for the provisional application to

support the claim it is only necessary that it disclose molar ratio values above the stated critical minimum. Since the provisional application, as shown above, does so, there is no question but that it supports the appealed claims under the *Wertheim* and *Blaser* doctrines enunciated above; notwithstanding that the application does not employ the identical language, *ipsis verbis*, to describe the ratio. Stated simply: The claimed process requires a certain molar ratio above a certain minimum value and the application contains two working examples wherein the critical ratio is above the stated minimum. The only conclusion to be drawn, then, is that appellant was in possession of the claimed invention at the time of filing the provisional application and is, therefore, entitled to the filing date thereof.

The question of whether an earlier application sufficiently meets the “description requirement” to provide adequate support for a later filed application has, of course, been the subject of much litigation. The inquiry into whether the description requirement is met must be determined on a case-by-case basis and is a question of fact. *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). The examiner has the initial burden of presenting evidence or reasons why persons skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. *In re Wertheim*, 541 F.2d 257, 265, 191 USPQ 90, 98 (CCPA 1976); *Ex parte Sorenson*, 3 USPQ2d 1462, 1463 (Bd. Pat. App. & Inter. 1987).

The Examiner herein has not met that burden, since all that has been alleged is that the claimed range is supposedly “open-ended” and appellant does not disclose the entire range. That, in and of itself, is insufficient reason for denying priority. The criticality in the claimed range is the stated lower limit. Nothing is stated or disclosed as to the criticality an upper limit. Accordingly, the “range” in question is “above” 0.7. The other values above 0.7 are not critical

and therefore, need not be exemplified. Appellant sets forth two ratios in the Examples and both are above the critical limit of 0.7. How many such values must appellant recite before the Examiner would be satisfied; particularly in view of the fact that values above 0.7 are not critical. If appellant had described values below the critical limit, the Examiner's argument might be well founded.

For these reasons, the Examiner has not met his "burden of presenting evidence or reasons why persons skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims" required by *Wertheim*, supra. Accordingly, the "description requirement" has been met.

There are many cases in the law that support appellant's position in addition to *Wertheim* and *Blaser*. According to *Ex parte Sorenson*, 3 U.S.P.Q.2d 1462, 1463 (P.T.O. Bd. Pat. App. & Int'l 1987) the test for determining whether a claimed invention is adequately described in the specification is whether the originally filed disclosure *reasonably* conveys to a person having ordinary skill in the art that the applicant had possession of the subject matter later claimed.

In *Sorenson* the examiner called attention to the following recitations in the claims on appeal: (1) "copper complexes of imines", (2) "binuclear copper Complexes of carboxylic acids", and (3) "a binuclear copper complex of an aliphatic carboxylic acid or binuclear copper complex of an aryl carboxylic, acid". Focusing on the written description requirement of 35 USC 112, first paragraph, the examiner took the position that those recitations do not appear in appellant's original disclosure and, moreover, they are not adequately supported by the examples in the specification disclosure. The examiner asserted that appellant's specification disclosure did not support the above-noted, narrower expressions.

Here, the examiner stated that the claim expressions at issue "do not appear in the original disclosure", which means to say that they do not find literal support therein. Further, the examiner stated, the expressions "are not adequately supported by the few specific compounds in the specification". Based on those pronouncements, the examiner concluded that appellant's claimed subject matter is not supported by a written description in the specification as filed.

The court stated:

*"---Quite clearly, however, the examiner has not met his initial burden of presenting evidence why a person having ordinary skill in the art would not recognize in appellant's specification a description of the invention defined by the claims. In re Wertheim, supra. Furthermore, the only reasoning presented which we can discern is an example of ipse dixit reasoning, resting on a bare assertion by the examiner ---With respect to the claim recitations "binuclear copper complexes of carboxylic acids" a "binuclear copper complex of an aliphatic carboxylic acid", and "a binuclear copper complex of an aryl carboxylic acid", we again agree with appellant that his originally filed disclosure reasonably conveys to the skilled artisan that he had possession of that subject matter. As pointed out by appellant in his Brief, the specification disclosure as filed presents five working examples of binuclear copper complexes of carboxylic acids. Four of those are representative of a binuclear copper complex of an aryl carboxylic acid and one is representative of a binuclear copper complex of an aliphatic carboxylic acid. --- Given those working examples together with the broader disclosure of copper complexes of carboxylic acids, both aliphatic and aromatic, we have no doubt that appellant's disclosure reasonably conveys to the skilled artisan that appellant had possession of the subject matter now claimed---". (emphasis added)*

As is apparent, a very similar situation is presented herein. As in *Sorenson*, appellant has presented several examples coming within a claimed range and made it obvious that he was aware of the critical lower limit of that range. As in *Sorenson*, appellant should be adjudged to have been in possession of the invention at the time of the filing of the Provisional Application.

The case of *In re Smythe*, 480 F.2d 1376, 1384 (C.C.P.A. 1973) presented the C.C.P.A. a situation where a new claim was alleged to be broader than the subject matter disclosed in the specification. In that case, the court held that the description of properties and functions of the air

or other gas segmentizing medium described in the patent holder's specification would suggest to a person skilled in the art that the invention includes the use of inert fluid. The court relied on known industry standards and ruled that the broader claim language would be permitted. To illustrate its point, the court developed a hypothetical scenario. In the scenario, the court stated that an applicant who described in his or her specification the use and function of a 1-pound lead weight as a scale counterbalance would immediately convey to any person skilled in the art the knowledge that the applicant invented a scale with a 1-pound counterbalance weight, regardless of its composition. The court held that it is not necessary that the application describe the claim limitations exactly, but only so clearly that persons of ordinary skill in the art to which the invention pertains would recognize from the disclosure that the applicant's invention included those limitations.

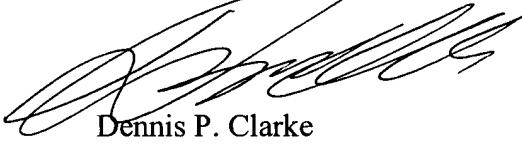
From the foregoing, it is clear that the Examiner has not met the initial burden, other than "the *ipse dixit* reasoning, resting on a bare assertion by the Examiner", of establishing that the provisional application does not meet the description requirement. Indeed it is abundantly clear that appellant has unequivocally established that the provisional application does indeed satisfy the description requirement.

## CONCLUSION

It is respectfully requested that the final rejection of record be reversed and the application remanded to the Examiner for immediate allowance.

Respectfully submitted,

MILES & STOCKBRIDGE P.C.



Dennis P. Clarke  
Registration No. 22,549

Date: April 21, 2005

DPC/maa

Miles & Stockbridge  
1751 Pinnacle Drive  
McLean, VA 22102  
Tel: (703) 610-8672  
Fax: (703) 610-8686  
[dclarke@milesstockbridge.com](mailto:dclarke@milesstockbridge.com)



**A P P E N D I X O F C L A I M S O N A P P E A L – S E R I A L N O. 10/059,278**

1. A textile having at least one adherent polyurethane backing, said backing being prepared from a polyurethane forming composition which comprises:
  - (A) a polyisocyanate and
  - (B) a mixture of a vegetable oil, a cross-linking agent comprised of a multi-functional alcohol present in a ratio to said vegetable oil such that there are at least 0.7 moles of OH groups per mole of bulk vegetable oil, a catalyst, and a blowing agent.
2. The textile of claim 1 wherein said vegetable oil is chosen from the group comprising soy oil, rapeseed oil or palm oil.
3. The textile of claim 1 wherein said vegetable oil comprises blown soy oil.
4. The textile of claim 1 wherein said catalyst is a tertiary amine.
5. The textile of claim 1 wherein the multi-functional alcohol cross-linking agent comprises a blend of ethylene glycol and 1,4-butanediol.

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6. The textile of claim 1 wherein the blowing agent is selected from the group consisting of methylisobutyl ketone, acetone, water and mechanically frothed air.

7. The textile of claim 1 wherein said polyisocyanate comprises a diisocyanate and said vegetable oil comprises bulk soy oil.

8. The textile of claim 1 wherein said catalyst is present in the amount of at least 2.5 parts and said polyisocyanate (A) is present in the amount of 70 parts per 100 parts of mixture (B).

9. The textile of claim 1 wherein the polyurethane comprises the reaction product of between 70 and 85 parts of an (A) and 100 parts of (B) and wherein A comprises a diisocyanate and B comprises 100 parts of blown soy oil, between 8 to 18 parts cross-linking agent providing at least 0.7 moles of OH groups per mole of vegetable oil, 1 to 12 parts catalyst and 2 to 14 parts blowing agent.

10. The textile of claim 1 wherein the polyurethane comprises the reaction product of 70 to 85 parts of A and 100 parts of B and wherein A comprises a diisocyanate and B comprises 100 parts blown soy oil, from 8 to 16 parts cross linking agent providing 0.70 to 1.2 moles OH per mole soy oil, from 25 to 11 parts catalyst and from 5 to 13 parts blowing agent.

11. The textile of claim 1 wherein the polyurethane comprises the reaction product of 70 to 85 parts of A with 100 parts of B and wherein A comprises a diisocyanate and B comprises 100 parts of blown soy oil, from 9 to 14 parts cross linking-agent providing 0.70 to 1.2 moles OH per mole soy oil, from 2 to 6 parts catalyst and from 4 to 9 parts blowing agent.

12. The textile of claim 1 wherein said catalyst comprises a tertiary amine.

13. The textile of claim 1 wherein said catalyst is chosen from the group comprising a mixture of 33% 1,4-diaza-bicyclo-octane and 67% dipropylene glycol; a tertiary amine blowing catalyst; and N,N',N"-dimethylamino-propyl-hexahydrotriazine tertiary amine.

14. The textile of claim 1 wherein said polyisocyanate is chosen from the group consisting of 2,4 toluene diisocyanate, 4,4-diphenylmethane diisocyanate and 2,4-diphenylmethane diisocyanate.

15. The textile of claim 1 wherein B further comprises from 2-5 parts surfactant agent for affecting foam cell size.

16. The textile of claim 1 wherein B further comprises from 7-12 parts molecular sieve agent for absorbing water.

17. The textile of claim 1 wherein said polyurethane backing has a coating weight of about 20-40 oz/sq. yd.

18. The textile of claim 1 comprising a primary backing material having a pile attached to one component thereof.

19. The textile of claim 1 comprising a floor covering.

20. The textile of claim 1 wherein a secondary textile substrate is laminated to said at least one polyurethane backing.

21. The textile of claim 20 wherein said secondary textile is a woven, non-woven or composite woven/non-woven textile.

22. The textile of claim 1 wherein said polyurethane backing comprises at least two separately applied polyurethane-forming compositions.

23. The textile of claim 22 wherein a secondary textile is laminated between said at least two polyurethane coatings.

24. The textile of claim 22 wherein a secondary textile is laminated to the outermost polyurethane coating.

25. The textile of claim 23 or 24 wherein said secondary textile is a woven, non-woven or composite woven/non-woven textile.

26. A method of preparing the textile of claim 1 comprising coating a textile with at least one polyurethane forming composition which comprises:

(A) a polyisocyanate and  
(B) a mixture of a vegetable oil, a cross-linking agent comprised of a multi-functional alcohol present in a ratio to said vegetable oil such that there are at least 0.7 moles of OH groups per mole of bulk vegetable oil, a catalyst, and  
a blowing agent,  
and subjecting said at least one coating to conditions which result in the reaction of (A) and (B) to form said polyurethane.

27. The method of claim 26 wherein (A) comprises a diisocyanate and (B) comprises blown soy oil, a cross-linker comprised of a multi-functional alcohol, present in a ratio with said soy oil such that there is at least 0.7 moles of OH group per mole of bulk soy oil, a catalyst and a blowing agent.

28. The method of claim 26 wherein (A) comprises a diisocyanate and (B) comprises blown soy oil, a multi-functional alcohol cross-linking agent present in such quantities that a ratio of moles of OH groups to moles of bulk soy oil is between 0.7 and 1.2 equivalent moles of OH groups to one mole of bulk soy oil, a tertiary amine catalyst and a blowing agent.

29. The method of claim 26 wherein the ratio of (A) to (B) is 70 to 85 parts to 100 parts.

30. The method of claim 26 wherein a secondary textile substrate is laminated to said at least one polyurethane backing.

31. The method of claim 26 wherein said secondary textile is a woven, non-woven or composite woven/non-woven textile.

32. The method of claim 26 wherein said polyurethane backing comprises at least two separately applied polyurethane forming compositions.

33. The method of claim 32 wherein a secondary textile is laminated between said at least two polyurethane coatings.

34. The method of claim 32 wherein a secondary textile is laminated to the outermost polyurethane coating.

35. The method of claim 32 or 33 wherein said secondary textile is a woven, non-woven or composite woven/non-woven textile.